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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/823,542

04/14/2004

Noriaki Hashimoto

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EXAMINER

PHAN, MAN U

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/823,542	Applicant(s) HASHIMOTO, NORIAKI	
	Examiner Man Phan	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment and Argument

1. This communication is in response to applicant's 03/26/2008 Amendment in the application of Hashimoto for a "Method and system for operation of a resilient closed communication network without a dedicated protection network segment" filed 04/14/2004 has been examined. This application is a division of 09/523,375 filed 3/10/2000 is now US Patent #6,894,978. The amendment and response has been entered and made of record. Claims 1-4 are pending in the application.

2. Applicant's remarks and argument to the rejected claims are insufficient to distinguish the claimed invention from the cited prior arts or overcome the rejection of said claims under 35 U.S.C. 103 as discussed below. Applicant's argument with respect to the pending claims have been fully considered, but they are not persuasive for at least the following reasons.

3. In response to applicant's argument that the combination of cited references fails to present a prima facie case of obviousness. In response, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). It is not necessary that a "prima facie" case of unpatentability exist as to the claim in order for "a substantial new question of patentability" to be present as to the claim. Thus, "a substantial new question of patentability" as to a patent claim could be present even if the examiner would not necessarily reject the claim as either fully anticipated by, or obvious in view

of, the prior art patents or printed publications. As to the importance of the difference between “a substantial new question of patentability” and a “prima facie” case of unpatentability see generally *In re Etter*, 756 F.2d 852, 857 n.5, 225 USPQ 1, 4 n.5 (Fed. Cir. 1985). Also, See MPEP § 2141.01(a) for a discussion of analogous and nonanalogous art in the context of establishing a prima facie case of obviousness under 35 U.S.C. 103. See MPEP § 2131.05 for a discussion of analogous and nonanalogous art in the context of 35 U.S.C. 102. 904.02.

4. In response to Applicant’s argument that the reference does not teach or reasonably suggest the functionality upon which the Examiner relies for the rejection. The Examiner first emphasizes for the record that the claims employ a broader in scope than the Applicant’s disclosure in all aspects. In addition, the Applicant has not argued any narrower interpretation of the claim limitations, nor amended the claims significantly enough to construe a narrower meaning to the limitations. Since the claims breadth allows multiple interpretations and meanings, which are broader than Applicant’s disclosure, the Examiner is required to interpret the claim limitations in terms of their broadest reasonable interpretations while determining patentability of the disclosed invention. See MPEP 2111. In other words, the claims must be given their broadest reasonable interpretation consistent with the specification and the interpretation that those skilled in the art would reach. See *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000), *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999), and *In re American Academy of Science Tech Center*, 2004 WL 1067528 (Fed. Cir. May 13, 2004). Any term that is not clearly defined in the specification must be given its plain meaning as understood by one of ordinary skill in the art. See MPEP 2111.01. See also

In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), *Sunrace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1302, 67 USPQ2d 1438, 1441 (Fed. Cir. 2003), *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 67 USPQ2d 1132, 1136 (Fed. Cir. 2003). The interpretation of the claims by their broadest reasonable interpretation reduces the possibility that, once the claims are issued, the claims are interpreted more broadly than justified. See *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). Also, limitations appearing in the specification but not recited in the claim are not read into the claim. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the failure to significantly narrow definition or scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims in parallel to the Applicant in the response and reiterates the need for the Applicant to distinctly define the claimed invention.

5. Applicant's argument with respect to the rejected claims that the cited references fails to disclose or suggest "*in any way how to optimize the routing of a data packet*" as claimed. The Applicant's attention is directed to the Fig. 3 of US#6,532,088, in which Dantu discloses a functional block diagram of a fiber optic ring network according to a preferred embodiment of the invention. Dantu discloses an apparatus and a method for transporting IP user traffic over a fiber optic ring network that includes a plurality of fiber optic ring network nodes. One ring is for conducting the user traffic on a working path and the other ring is for conducting the same user traffic on a protection path in the event of a failure in a communication link in the first ring on a protection path. A central node is coupled to a plurality of nodes to provide forwarding tables

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and updates to the nodes. As a result, IP traffic may be routed through the fiber optic ring network in a manner that provides fast switching from a working path to a protection path to minimize lost data packets whenever a communication link in the working path fails (*optimizing the routing of a data packet*). Additionally, this capability is provided without requiring each node to have full IP routing capability. The forwarding tables for the protection and working paths provide for path routes and forwarding for the packets on a packet by packet basis. Accordingly, a ring may serve as both a working path and a protection path according to the origin and destination of the data packets traveling thereon. Additionally, the central node is adapted to generate multiple forwarding tables to accommodate packet by packet forwarding in a network created to support virtual private networks. The forwarding tables also are set up to support multicast transmissions of data packets (Col. 4, lines 40 plus and Col. 7, lines 66 plus).

It's note that, selecting an optimal route among the functioning routes and sending the data packet from the first distributing station to the second distributing station using the optimal route is well known to the inventors in the communications.

Since no substantial amendments have been made and the Applicant's arguments are not persuasive, the claims are drawn to the same invention and the text of the prior art rejection can be found in the previous Office Action. Therefore, the Examiner maintains that the references cited and applied in the last office actions for the rejection of the claims are maintained in this office action.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

7. Claims 1, 3-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Dantu et al. (US#6,532,088).

With respect to claim 1, Dantu et al. (US#6,532,088) discloses a method for operating a resilient closed communication network comprising at least one communication ring, the method comprising the steps of:

receiving a data packet from a first external network at a first distributing station connected to the resilient closed communication network (receiving IP packet 124 at node 204, see figure 2);

identifying a second distributing station connected to the resilient closed communication network from which the data packet is to be forwarded to a second external network;

determining functioning routes from the first distributing station to the second distributing station within the resilient closed communication network;

selecting an optimal route among the functioning routes; and

sending the data packet from the first distributing station to the second distributing station using the optimal route (see claim 1 and figure 3).

With respect to claim 3, Dantu further discloses no segment of the at least one communication ring is used as a dedicated protection segment (*one ring is used as a dedicated protection ring and the other as working ring, see col. 8 lines 1-19*).

With respect to claim 10, Dantu further discloses the at least one communication ring is made of fiber optic cables (see col. 7 lines 65 to col. 8 line 19).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dantu et al. (US#6,532,088).

With respect to claim 2, the reference discloses a method and system for operating a resilient closed communication network comprising at least one communication ring, according to the essential features of the claim. Dantu et al. (US#6,532,088) fails to disclose the optimization factors including an available traffic volume, an actual distance value, and a preference value are considered in the selecting step.

However, it would have been obvious to one having ordinary skill in the art at the time of invention was made to cause the processor 402 of node 400 to consider the traffic value, distance, and preference value when determining the path route in order to avoid overloading the communication link.

It's also noted that the routing module (*processor 402 of node 400*) can determine the route as a function of a route condition parameter such as, by way of example, an optimization factor, a route distance, a time, a transit time, a cost, and a unit cost. wherein the database of

route optimization factors includes information about at least one of the following factors:
distances between processing stations; average speed between processing stations; available transportation equipment; average processing time at each processing station; traffic conditions; and weather.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Daruwalla et al. (US#6430,700) is cited to show a system and method for fault recovery for a two line bi-directional ring network.

The Frank et al. (US#6859,430) is cited to show the protection switching of virtual connections.

The Tappan (US#76,473,421) is cited to show the hierarchical label switching across multiple OSPF areas.

The Lamberton et al. (US#7,003,581) is cited to show a system and method for improved load balancing and high availability in a data processing system having an IP host with a marp layer.

The Iwata (US#2006/0075136) is cited to show an interdomain routing system.

11. **THIS ACTION THIS ACTION IS MADE FINAL.** See MPEP ' 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached on Mon - Fri from 6:00 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-

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Mphan

June 17, 2008

/Man Phan/

Primary Examiner, Art Unit 2619